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PATENT
Docket No. 415852000100
Client Ref. VS:C:FP10412

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Assistant Commissioner for Patents, Washington, D.C. 20231, on July 30, 1999.

Denise Lade
Denise Lade

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:

Jeffrey John GORMAN

Serial No.: 09/202,035

International Filing Date: June 4, 1997

For: VIRAL PEPTIDES WITH
STRUCTURAL HOMOLOGY TO
PROTEIN G OF RESPIRATORY
SYNCYTIAL VIRUS

Examiner: Not Yet Assigned

Group Art Unit: Not Yet Assigned

**INFORMATION DISCLOSURE
STATEMENT UNDER 37 C.F.R. § 1.97**

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Pursuant to 37 C.F.R. § 1.97, applicant submits for consideration in the above-identified application the documents listed on the attached Form PTO-1449. Copies of the documents are also submitted herewith. The Examiner is requested to make these documents of record.

This Information Disclosure Statement is submitted:

- ☒ Within three months of the application filing date or before receipt of a first Office Action on the merits; accordingly, no fee or separate requirements are required.
- ☐ After receipt of a first Office Action on the merits but before a final Office Action or Notice of Allowance.
 - ☐ A fee is required. A check in the amount of * is enclosed.
 - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided below; accordingly, no fee is believed to be due.
- ☐ After receipt of a final Office Action or Notice of Allowance, but before payment of the issue fee. Accordingly, a Petition requesting consideration of the Information Disclosure Statement, an authorization to charge our deposit account, and a Certification under 37 C.F.R. § 1.97(e) are provided herein.

Applicant would appreciate the Examiner initialing and returning the Form PTO-1449, indicating that the information has been considered and made of record herein.

This Information Disclosure Statement under 37 C.F.R. § 1.97 is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

In the unlikely event that the Patent Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing

415852000100. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: July 30, 1999

Respectfully submitted,

By: Gladys H. Monroy
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Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary)	Docket Number 415852000100	Application Number 09/202,035
	Applicant Jeffrey John GORMAN	
	Int'l Filing Date June 4, 1997	Group Art Unit Not Yet Assigned

U.S. PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Name	Class	Subclass	Filing Date If Appropriate

FOREIGN PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Country	Class	Subclass	Translation YES NO
Doc	1.	02/29/96	WO 96/06112	WIPO	—	—	
↓	2.	05/17/96	WO 96/14409	WIPO	—	—	X

OTHER DOCUMENTS

(including author, title, Date, Pertinent Pages, Etc.)

Examiner Initials	Ref. No.	Title
Doc	3.	Åkerlind-Stopner, B. et al., (October 1990) "A subgroup-specific antigenic site in the G protein of respiratory syncytial virus forms a disulfide-bonded loop" <i>Journal of Virology</i> 64(10):5143-5148.
	4.	Alansari, H. et al., (1993) "Nucleotide sequence analysis of the ovine respiratory syncytial virus G glycoprotein gene" <i>Virology</i> 196:873-877.
	5.	Beavis, R.C. et al., (1992) "α-Cyano-4-hydroxycinnamic acid as a matrix for matrix-assisted laser desorption mass spectrometry" <i>Organic Mass Spectrometry</i> 27:156-158.
	6.	Cane, P.A. et al., (1991) "Identification of variable domains of the attachment (G) protein of subgroup A respiratory syncytial viruses" <i>Journal of General Virology</i> 72:2091-2096.
	7.	Cane, P.A. et al., (1995) "Molecular epidemiology of human respiratory syncytial virus" <i>Seminars in Virology</i> 6:371-378.
	8.	Chorev, M. and Goodman, M., (1993) "A dozen years of retro-inverso peptidomimetics" <i>Acc. Chem. Res.</i> 26(5):266-273.
	9.	Collins, P.L., "Chapter 4: The molecular biology of human respiratory syncytial virus (RSV) of the genus <i>Pneumovirus</i> " in <i>Paramyxoviruses</i> , Kingsbury, D.W. (ed) New York: Plenum Press; pp. 103-162 (1991).
	10.	Doreleijers, J.F. et al., (1996) "Solution structure of the immunodominant region of protein G of bovine respiratory syncytial virus" <i>Biochemistry</i> 35(47):14684-14688.
	11.	Feldman S.A. et al., (July 9-13, 1994) "Characterization of the human respiratory syncytial virus G glycoprotein receptor binding domain using synthetic peptides" <i>Proceedings of the 13th Annual Meeting of the American Society of Virology</i> University of Wisconsin-Madison, Abstract No. P15-5, page 158.

EXAMINER: <i>Deogun h</i>	DATE CONSIDERED: <i>06/08/01</i>
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Bel	12.	Gallop, M.A. et al., (April 29, 1994) "Applications of combinatorial technologies to drug discovery. 1. Background and peptide combinatorial libraries" <i>J. Med. Chem.</i> 37(9):1233-1251 (1994).
	13.	Garcia, O. et al., (September 1994) "Evolutionary pattern of human respiratory syncytial virus (Subgroup A): Cocirculation lineages and correlation of genetic and antigenic changes in the G glycoprotein" <i>Journal of Virology</i> 68(9):5448-5459.
	14.	Gorman, J.J. et al., (1990) "Role of mass spectrometry in mapping strain variation and post-translational modifications of viral proteins" <i>Biomed. Environ. Mass Spectrometry</i> 19:646-654.
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	16.	Gruber C. et al. (1983) "Respiratory syncytial virus polypeptide. III. The envelope-associated proteins" <i>Journal of General Virology</i> 64:825-832.
	17.	Gruber C. et al., (1985) "Respiratory syncytial virus polypeptides. IV. The oligosaccharides of the glycoproteins" <i>Journal of General Virology</i> 66:417-432.
	18.	Hall, C.B. (2 September, 1994) "Prospects for a respiratory syncytial virus vaccine" <i>Science</i> 265: 1393-1394.
	19.	Heilman, C.A. (1990) "Respiratory syncytial and parainfluenza viruses" <i>Journal of Infectious Diseases</i> 161:402-406.
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	21.	Hogan, Jr. (April 1997) "Combinatorial chemistry in drug discovery" <i>Nature Biotechnology</i> 15:328-330.
	22.	Johnson, P.R. et al., (August 1987) "The G glycoprotein of human respiratory syncytial viruses of subgroups A and B: Extensive sequence divergence between antigenically related proteins" <i>Proc. Natl. Acad. Sci. USA</i> 84:5625-5629.
	23.	Kaufman, R. et al., (1993) "Mass spectrometric sequencing of linear peptides by product-ion analysis in a reflectron time-of-flight mass spectrometer using matrix-assisted laser desorption ionization" <i>Rapid Communications in Mass Spectrometry</i> 7:902-910.
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	25.	Kingsbury, D.W. (1990) "Chapter 34: Paramyxoviridae and their replication" in <i>Virology</i> , Fields, B.N., Knipe, D.M. et al. (eds.), 2nd edition, New York: Raven Press, pp. 945-962.
	26.	Lambert, D.M. et al., (1983) "Respiratory syncytial virus glycoproteins" <i>Virology</i> 130:204-214.

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JCC	27.	Lambert, D.M. (1988) "Role of oligosaccharides in the structure and function of respiratory syncytial virus glycoproteins" <i>Virology</i> 164:458-466.	
	28.	Langedijk, J.P.M. et al. (1996) "Proposed three-dimensional model for the attachment protein G of respiratory syncytial virus," <i>J. Gen. Virol.</i> 77:1249-1257.	
	29.	Lerch, R.A. et al. (November 1990) "Nucleotide sequence analysis and expression from recombinant vectors demonstrate that the attachment protein G of bovine respiratory syncytial virus is distinct from that of human respiratory syncytial virus" <i>Journal of Virology</i> 64(11):5559-5569.	
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	↓	38.	Olson, G.L. et al., (15 October 1993) "Concepts and progress in the development of peptide Mimetics," <i>J. Med. Chem.</i> 36(21):3039-3049.
39.		Roepstorff, P. et al. (1984) "Proposal for a common nomenclature for sequence ions in mass spectra of peptides" <i>Biomedical Mass Spectrometry</i> 11(11):601.	
40.		Rouse, J.C. et al., (1995) "A comparison of the peptide fragmentation obtained from a reflector matrix-assisted laser desorption-ionization time-of-flight and a tandem four sector mass spectrometer" <i>Journal of American Society for Mass Spectrometry</i> 6:822-835.	
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DATE CONSIDERED: August 1, 1997			
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boc	41.	Rueda, P. et al., (1994) "Loss of conserved cysteine residues in the attachment (G) glycoprotein of two human respiratory syncytial virus escape mutants that contain multiple A-G substitutions (Hypermutations)" <i>Virology</i> 198:653-662.	
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	44.	Spengler, B. et al., (1992) "Peptide sequencing by matrix-assisted laser-desorption mass spectrometry" <i>Rapid Communications in Mass Spectrometry</i> 6:105-108.	
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	46.	Sullender, W.M. et al. (October 1991) "Genetic diversity of the attachment protein of subgroup B respiratory syncytial viruses" <i>Journal of Virology</i> 65(10):5425-5434.	
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	48.	Trudel, M. et al., (1991) "Protection of BALB/c mice from respiratory syncytial virus infection by immunization with a synthetic peptide derived from the G glycoprotein" <i>Virology</i> 185:749-757.	
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	50.	Wertz, G.W. et al. (June 1985) "Nucleotide sequence of the G protein gene of human respiratory syncytial virus reveals an unusual type of viral membrane protein" <i>Proc. Natl. Acad. Sci. USA</i> 82 Biochemistry, pp. 4075-4079.	
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